

**A METHOD AND SYSTEM FOR IMAGE PROCESSING FOR
AUTOMATIC ROAD SIGN RECOGNITION**

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Abstract of the Invention

10 The invention is a method and system of processing an image such as a road
sign wherein the image is viewed from a host such as an automobile. The method
begins with the initiating of a scan of an object to obtain an input. The input is
converted to a signal before comparing the input with a set of stored inputs to
determine a match. The converting step occurs via a fourier or similar transform to
produce a transformed input; and, then filters the transformed input using nonlinear
filtering. The stored inputs are predetermined by inputting or scanning one or more
15 reference images. If a match is determined, the system will read a set of
instructions associated with the stored reference image. However, if a match is not
determined, then the scanner will continue to scan for a second or subsequent
image to be subjected to the comparison step. The system itself comprises means
for scanning the target image and returning the image to the system for conversion
20 to a signal indicative of a data set and conversion means. The reference images are
stored in a memory of the system which can be located within the system housing
or within the host itself. In addition to the stored reference images, a set of one or
more instructions can be stored with each image wherein the set of instructions is
indicative of an action to be performed by the host if a match is determined
25 between the scanned image and a stored reference image.